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EFFECT OF FARM CREDITS ON INCREASING AGRICULTURAL PRODUCTION AND FARM EFFICIENCY

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It is a noteworthy fact that agricultural production in the United States is falling far short of keeping pace with our increase in population. In the decade 1899-1909 the total production of cereals only increased 1.6 per cent while the population increased 21 per cent. The result of this condition has been the rapid falling off of our agricultural exports and the increased price of farm products. During this same decade the value of farm products advanced 80 per cent and notwithstanding the increased price of farm products the average annual value of agricultural exports during the last half of the decade was only \$964,449,000 and during the first half \$874,657,000. When compared with European farming, American agriculture is characterized by its extensiveness and low crop yields. The average crop yields of the leading European nations, except Russia, are at least double the average yields per acre of the same crops in the United States. But on the other hand the average acreage cultivated by the American farmer is much greater than that cultivated by the European farmer so that the production per farmer in American agriculture is far greater than in any of the European nations. The high production per farmer in America is due to the extensive use of labor-saving machinery, our abundance of arable land and its natural fertility. That we have reached our limit of agricultural production under methods practiced in the past is generally admitted. The public lands that are suitable to farming have all been occupied, no revolutionary labor-saving machinery is likely to be invented and future increase of agricultural production must come principally from increased farm production, through increased crop yields, better live stock and more economical and efficient methods of farm management.

Increased Farm Credit

Extensive farming is always accompanied by a low investment of capital per acre for equipment and operation. To increase agricultural production on our present area means an increased investment in the equipment and operation of our farms. Increased crop yields are obtained (1) by controlling the water supply, either by drainage or irrigation (depending upon conditions); (2) by increasing the fertility of the land by adding plant food through commercial fertilizers, stable manure or growing and plowing under suitable crops; (3) by improving the physical and chemical conditions of the soil through the application of lime; (4) by deeper and more thorough tillage of the soil; (5) by growing more productive and disease resistant varieties of crops; (6) by controlling insect and fungus enemies of the crop. All of these operations increase the cost of production. If the cost of any one of them does not show a proportional increase in the crop yield the operation is not justified. But as a matter of fact these operations under the right conditions show much more than a proportional return in the crop production. Why then are they not more generally practiced? Primarily because of lack of capital or proper credit facilities for financing the American farmer.

One of the most striking differences between the agriculture of the European countries that are most commonly compared with our own is the rural credit systems. Germany, France, Denmark, Belgium, Holland, Ireland have rural credit systems that have been organized and developed to meet the needs of their farmers. In America we have failed as yet to recognize that the credit need of agriculture is different from other industries. The turnover of capital invested in agriculture is slow. Investments made in permanent improvements such as buildings, fencings, drainage will not be returned in less than fifteen to twenty years and investments made in farm operations such as growing crops and feeding live stock will not be returned ordinarily in less than a year. Consequently short time loans such as are suitable to mercantile and other industries in which the turnover of capital invested is frequent, are not adapted to the needs of the farmer.

The rates of interest charged on farm loans are another important factor that deter American farmers from utilizing more exten-

sively our present credit facilities. Investigations show that interest rates on farm loans are materially higher than prevail on loans made to other industries on security not as safe as given by the farmer. This is due in part to the fact that farmers have not organized to borrow their credit in large sums but each farmer has negotiated his own loan as best he could and the expense of making and collecting the loan is high. The present system of making farm loans is exceedingly expensive for both lender and borrower and is comparable to our cumbersome and expensive methods in vogue for distributing and marketing farm products.

Farmers can make a comfortable living at present prices of farm products by following farm methods that have prevailed in the past and even though they are convinced that they could make more by practicing improved methods they refuse to borrow capital for this purpose under present conditions. The farmer who has surplus capital is usually a man of years who prefers to loan his money at interest rather than to invest it in his farm. He is past the time of life when he cares to make any radical change in his methods of farming or to invest in slow paying permanent improvements. No industry is harassed more severely with labor troubles than farming; and increased investment in farm operations means an increase in farm labor. The farmer past middle age with a comfortable competence says, "I know I could make more out of my farm if I would invest more in it, but I will leave it to the younger men to take up these new methods. I am too old to begin and farm labor is too scarce."

The fact that farmers are heavy depositors in the banks is often advanced as an argument that there is no need of any change in our rural credit system or any call for more credit in agriculture. The farmers who have deposits on interest are not the men who need the credit neither are they the men who are increasing agricultural production.

The men who need better credit facilities are the young men and middle aged men who have the future before them and are the determining factor in the future development of our agriculture. No kind of credit system will influence the older farmers to materially change their methods.

Kind of Credit Needed

Two distinct classes of credit are needed by farmers: First, short time loans that provide working capital for operating the farm. Such capital is spent to pay farm labor, to purchase seed, commercial fertilizers, feeding stuffs and the turnover will probably be at least once a year. Such loans are ordinarily made on personal security or mortgage on personal property of the farmer. In the corn belt and the more prosperous agricultural communities the existing banks furnish this class of credit fairly satisfactorily. But in the Southern States and the less prosperous sections of the North the crop lien system frequently prevails. Under this system the farmer is financed not by the bank but by local merchants who furnish farm supplies on credit charging the highest retail price and interest, taking for their security a mortgage on the growing crop. As soon as the crop is harvested it must be sold to pay off the debt to the merchant. As a consequence the farmer is forced to sell regardless of market conditions. Furthermore the cropping system is fixed and cannot be changed. The merchant knows what he can safely expect from a crop of cotton or a crop of tobacco but he does not know what a crop of alfalfa or a crop of clover will return or what to expect from live stock if a farmer is furnished credit to buy and feed live stock. Such a credit system results in a minimum agricultural production and a constantly decreasing farm efficiency because the constant cropping of the land in crops that are sold depletes the fertility of the farm.

H. E. Esswein of the Ohio College of Agriculture working in the rural life survey of the state in 1912 reports conditions in the white burley tobacco district as follows: "Tobacco growing is partly in the hands of tenant farmers who remain on one farm for short periods of time in many cases for only a year, or for two at the most. So numerous are tenants in some sections that well informed persons say that 90 per cent of the tobacco grown there is done by tenant farmers usually on the shares, one-half of the crop, or one-half of the proceeds of the sales goes to each party. The landlord furnishes his tenant a house, a garden or truck patch, horses or mules, and a few farm implements. Owing to the fact that tobacco is a crop from which one cannot hope to get returns for at least a year from sowing the seed, a system of advancing money to tenant

growers has sprung up. The system is as follows: After putting out his tobacco the grower will come to a storekeeper usually, and tell him that he would like to get an advance on his crops. The storekeeper finds out how much tobacco he has out, and determines what would be a safe loan on the crop. The grower then gives his note at about 8 per cent interest on the crop. The amount of the note is dealt out at the store to the grower and his family, as their needs require. The storekeeper holds the note until the crop is sold or else has it discounted at the bank for 6 per cent, thus enabling him to make 2 per cent on the deal.

"Occasionally some man will take advantage of the one who has advanced him money. After having obtained an advance, and having dealt out the greater part of it, he will leave the locality. The creditor, in order to get his money out of the transaction must hire some one to cultivate the crop for the remainder of the season and harvest it.

"The loss from bad debts usually resulting from a bad crop or low prices also is very considerable. One merchant in an Ohio river town showed the writer twenty notes ranging in amount from \$15 to \$250, totaling close on to \$2,000 against persons to whom his firm had advanced money on their tobacco crop. On some he never expected to realize a cent, and on others only after a long wait until another crop is grown, or else by legal process. He offered to sell the whole lot for fifty cents on the dollar.

"On the tenant's side the system is equally unsatisfactory. It keeps him without money of his own for the greater part of the year. His family and himself are denied the things they ought to have oftentimes when they most need them. Suddenly he comes into possession of money, or at least power to purchase. The tendency now is for him and his family to buy more things than they need. Merchants say that they have to be very watchful along this line, so apt are these people to buy unnecessary articles. People who follow this custom seldom get anything ahead. Hardly ever do they get land of their own. The value of their crop is lived up before it is grown and each succeeding year finds them just where they were before. In some cases, doubtless, they are obliged to pay higher prices for goods than if they had the cash, though as a usual thing merchants claim to sell on credit the same as for cash. A great number of growers look upon the system as quite the proper

thing, and it is a current saying in the region that a tobacco crop will not grow well unless it is mortgaged. . . . The greatest need in the tobacco section next to getting the land into the hands of those who will cultivate it, is to provide some substitute for the ruinous practice of advancing money on the growing crop, alike disastrous to the lender and to the borrower."

Under such conditions the only method of increasing agricultural production is to finance the farmer so that he may follow a rational crop rotation and keep live stock so as to maintain the fertility of his soil.

To the more far seeing the ravages of the cotton boll weevil that have threatened the cotton industry of the South and caused losses of millions of dollars to the cotton growers, are recognized as blessings in disguise because it has forced the farmer to abandon the one crop system and adopt mixed farming, to follow a crop rotation and to keep live stock.

The second class of credit needed by farmers is long time loans for the purchase of land, its permanent improvement and equipment. This class of loans is secured by farm mortgages and the annual returns from the investments are small. Theoretically the borrower should not be required to repay his loan before it can be earned from the investment. The farmer who borrows money and invests it in new farm buildings, in draining his land, or otherwise increasing his farm production, cannot hope, under normal conditions, to recover his original investment in five years. It is more likely that it will take fifteen, twenty or twenty-five years.

The average life of farm machinery is ten years though with good care this period can be greatly extended. But under no circumstances is a farmer likely to recover the original purchase price in less than five years. While the returns from investments in farming are smaller than in most other industries yet they are also more certain. But if our farms are to be developed as they should be and their production increased it is imperative that provision shall be made for farmers to secure credit on terms commensurate with the returns received from their investments.

The modern progressive farmer, although he knows that investments made in improving his farm would greatly increase its production and pay for itself in ten or fifteen years, hesitates to borrow capital when it can be secured only for three or five years, and

often less time, and at the end of that time has to be paid back or renewed with additional expense. He prefers to put in improvements as he can pay for them out of the earnings of his farm and and is robbed of the advantage of the use of credit enjoyed by other industries.

What a Rural Credit System Should Provide

Whatever means are taken for establishing an American rural credit system there are a few fundamental things that should be accomplished.

1. Loans on farm mortgages should be made for long periods (not less than fifteen years) with provision that they may be repaid in part or in whole at any time at the convenience of the borrower.

2. Provision should be made for the repayment of the loan by the amortization of the principal, paying installments on the principal with each payment of the interest. This will enable the farmer to pay off his loan from the returns of his investment and the terms should be such that the payments would not be greater than the earnings from the investment.

3. Farm mortgages should be made negotiable and a standard security that will circulate readily. This is done under the German rural credit system through the issuing of mortgage bonds by their land mortgage associations (the *landschaften*). These bonds are secured by the farm mortgages held by the associations and rank with government bonds for security and negotiability.

4. The rate of interest should be as low as the security offered and current rates will justify. It is generally admitted that there is no better security than arable farm land and that no class of borrowers are more certain to pay their obligations than farmers, in other words the risk is exceedingly small. Rendering farm mortgages readily negotiable will result in lowering the rate of interest and with a well organized rural credit system farmers should be able to borrow credit secured by first mortgages on their farms at as low a rate of interest as the largest manufacturing or transportation companies, and even as low as municipalities or states themselves. This has been the result in Germany where the present land mortgage credit system has existed since 1770.

5. Provision for short term loans to furnish working capital should be provided by any adequate rural credit system. For many

sections of the country an adaptation of the Raiffeisen system of Germany will probably furnish the best solution. This system based on the coöperation of borrowers and the joint and unlimited liability of members is suitable for those sections that are now at the mercy of the local merchant and have no credit at banks. Under such conditions nothing less than unlimited liability of members is likely to succeed. It was such conditions in Germany that caused the establishment of the system that bears his name, by Raiffeisen in 1847. In more prosperous sections where local banks fail to furnish the necessary working capital at reasonable rates of interest the Raiffeisen plan may be adopted with the modification of limited liability for members. This is being done throughout the more prosperous agricultural sections of Germany and furnishing farmers with working capital at slightly higher rates of interest than paid for their long time loans. In the province of Saxony, Germany, the average rate of interest paid by farmers for short time loans in their banks, for the past four years has been less than 5 per cent.

Increased farm production and farm efficiency are the direct result of increased investments of capital for the improvement of soil fertility, for improved live stock, for improved farm machinery and for farm labor. There are very few farmers using all the capital that could be used profitably in the operation of their farms. The rate of interest paid by farmers is not as important a consideration as the terms of the loan and the convenience with which it may be secured. There is a widespread sentiment among farmers against going in debt due to the unfavorable terms on which they have been able to borrow and the disastrous results that have often followed. This opposition to borrowing credit is reflected in the popular grange song, entitled "Don't Mortgage the Farm."

The American farmer as yet has not learned to use credit for productive purposes as the European farmer uses it. Neither has American agriculture assumed the permanent form of the European systems. Increased rural credit facilities are fundamental in bringing about these results and the federal and state governments can do no better service for the American farmer and our national welfare than to interest themselves in establishing rural credit systems suitable to American conditions.